UNITED STATES DISTRICT COURT EASTERN DISTRICT OF TEXAS MARSHALL DIVISION

| FREEDOM WIRELESS, INC. V. ALLTEL CORPORATION, ET AL. | & & & & & & & & & & & & & & & & & & & | No. 2:06cv504 (TJW-CE) |
|--|---------------------------------------|------------------------|
| FREEDOM WIRELESS, INC. V. CINGULAR WIRELESS LLC, ET AL. | & & & & & & & & & & & & & & & & & & & | No. 2:06cv505 (TJW-CE) |
| FREEDOM WIRELESS, INC. V. DOBSON CELLULAR SYSTEMS, ET AL | \$ \$ \$ \$ \$ | No. 2:07cv151 (TJW-CE) |
| FREEDOM WIRELESS, INC. V. SUNCOM WIRELESS HOLDINGS, INC., ET AL. | & & & & & & & & & & & & & & & & & & & | No. 2:07cv152 (TJW-CE) |

MEMORANDUM OPINION AND ORDER

1. Introduction

Plaintiff, Freedom Wireless, Inc. ("Freedom Wireless") asserts various claims of U.S. Patent. Nos. 5,722,067 ("the '067 patent), 6,157,823 ("the '823 patent"), and 6,236,851 ("the '851 patent") against the defendants in these cases, consolidated for claim construction purposes. This order resolves the claim construction disputes in these cases.

2. Background of the Technology

In general, the patents-in-suit relate to pre-paid wireless services. The '067 patent issued from application no. 364,479 ("the '479 application"). The '823 patent issued from application no. 09/009,199 ("the '199 application"). The '851 patent issued from application no. 09/118,378 ("the '378 application"). Both the '199 application and the '378 application are descendants of the '479 application.

The '067 patent is titled "Security Cellular Telecommunications System." The '067 patent describes a cellular telecommunications system having a security feature which allows only preauthorized users to complete cellular telephone calls. '067 Patent, Abstract. According to the Abstract, the system and method recognize a cellular telephone's pre-programmed and pre-selected telephone number and an automated number identification code, or ANI. The pre-selected telephone number is reserved to the pre-paid cellular system. The cellular telephone transmits the ANI and a dialed number identification system ("DNIS") code to a cellular switch, which contacts a host for validation by the pre-paid service provider. '067 Patent, Abstract.

The Summary of the Invention describes a system in which a cellular telephone is preprogrammed with a pre-selected telephone number and an ANI. The telephone number is reserved to the provider of the pre-paid service. The user enters a destination telephone number and initiates an off-hook condition, such as pressing the send button. The telephone then transmits the ANI and the DNIS to the cellular switch. At the switch, the ANI is recognized as being associated with a particular provider, and the switch forwards the ANI and the DNIS to the pre-paid cellular switch. '067 Patent, 3:38-59.

At the pre-paid service cellular system's switch, a host computer authenticates both the ANI

and the DNIS. The host checks the customer's account balance and, upon determining that the customer has a sufficient credit balance with the pre-paid provider, causes the dialing of the outbound number. During the call, the customer's account is decremented in pre-determined amounts depending on the length of the call. The system and method described in the patents provide for the transparent operation of the system, without any need for the customer to input additional preliminary numbers. '067 Patent, 3:60-4:24. By using the invention, the cellular telephone users are freed of the need to carry and use cards and of the need to enter account information as a first step in the authentication process. The possibility of fraud on the cellular service providers is also minimized.

Claim 10 is an illustrative independent claim:

A method for pre-paid cellular telephone service, said method comprising the steps of:

forwarding to a pre-paid switching system a dialed number identification system code (DNIS) and an automated number identification code (ANI) representing a call from a cellular telephone;

at the pre-paid switching system, verifying a positive balance in an account identified by the ANI;

forwarding the call to an LEC; and

decrementing the balance in the account at regular intervals during the call until the call is terminated or until the balance is no longer positive, whichever occurs first.

'067 Patent, claim 10.

The '823 patent is also entitled "Security Cellular Telecommunications System." The '823 patent shares a similar specification with the '067 patent. The claims of the '823 patent are directed to methods and systems for completing calls to a pre-paid wireless subscriber, for managing pre-paid

wireless communications, and for providing pre-paid wireless communications.

Claim 1 of the '823 patent is an illustrative independent claim:

A method of completing pre-paid wireless telephone calls to a subscriber, the subscriber having a prepaid subscriber account balance stored in a database, where the prepaid subscriber account balance is associated with a predetermined wireless telephone number assigned to the subscriber, comprising:

receiving the subscriber's wireless telephone number at a wireless switch, the telephone number corresponding to a wireless telecommunications event initiated by a party calling the subscriber's wireless telephone number, the wireless switch recognizing the subscriber's wireless telephone number as being associated with the subscriber;

communicating between a computer with access to the database and the wireless switch;

validating existence of a pre-determined subscriber account balance in the database; and

if the validating step is successful, completing a call.

'823 Patent, claim 1.

The '851 patent is titled "Prepaid Security Cellular Telecommunications System." The Abstract describes a cellular telecommunications system having a security feature that allows only pre-authorized users to complete cellular telephone calls, similar to the description in the Abstracts of the '067 and the '823 patents. The '851 patent, however, also describes and claims methods and apparatuses which allow pre-authorized users to purchase additional air time and monthly access fees with convenient pre-paid cards.

Claim 1 of the '851 patent is an illustrative independent claim:

A method of increasing a level of credit in a user account in a preauthorized telecommunications service, the method comprising:

receiving information from a wireless communications device, the

information comprising an identifier, and user-input, obtained from a vended medium, that represents a specific, pre-determined level of credit;

routing the received information to a wireless service provider based on the identifier; and

modifying an account at the wireless service provider based on the user-input, wherein modification of the account comprises increasing a level of credit available for wireless telecommunications service by the predetermined level of credit.

3. General Principles Governing Claim Construction

"A claim in a patent provides the metes and bounds of the right which the patent confers on the patentee to exclude others from making, using or selling the protected invention." *Burke, Inc. v. Bruno Indep. Living Aids, Inc.*, 183 F.3d 1334, 1340 (Fed. Cir. 1999). Claim construction is an issue of law for the court to decide. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 970-71 (Fed. Cir. 1995) (*en banc*), *aff'd*, 517 U.S. 370 (1996).

To ascertain the meaning of claims, the court looks to three primary sources: the claims, the specification, and the prosecution history. *Markman*, 52 F.3d at 979. Under the patent law, the specification must contain a written description of the invention that enables one of ordinary skill in the art to make and use the invention. A patent's claims must be read in view of the specification, of which they are a part. *Id.* For claim construction purposes, the description may act as a sort of dictionary, which explains the invention and may define terms used in the claims. *Id.* "One purpose for examining the specification is to determine if the patentee has limited the scope of the claims." *Watts v. XL Sys., Inc.*, 232 F.3d 877, 882 (Fed. Cir. 2000).

Nonetheless, it is the function of the claims, not the specification, to set forth the limits of the patentee's claims. Otherwise, there would be no need for claims. *SRI Int'l v. Matsushita Elec. Corp.*, 775 F.2d 1107, 1121 (Fed. Cir. 1985) (*en banc*). The patentee is free to be his own

lexicographer, but any special definition given to a word must be clearly set forth in the specification. *Intellicall, Inc. v. Phonometrics*, 952 F.2d 1384, 1388 (Fed. Cir. 1992). And, although the specification may indicate that certain embodiments are preferred, particular embodiments appearing in the specification will not be read into the claims when the claim language is broader than the embodiments. *Electro Med. Sys., S.A. v. Cooper Life Scis., Inc.*, 34 F.3d 1048, 1054 (Fed. Cir. 1994).

This court's claim construction decision must be informed by the Federal Circuit's decision in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (*en banc*). In *Phillips*, the court set forth several guideposts that courts should follow when construing claims. In particular, the court reiterated that "the *claims* of a patent define the invention to which the patentee is entitled the right to exclude." *Id.* at 1312 (emphasis added) (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). To that end, the words used in a claim are generally given their ordinary and customary meaning. *Id.* The ordinary and customary meaning of a claim term "is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, *i.e.* as of the effective filing date of the patent application." *Id.* at 1313. This principle of patent law flows naturally from the recognition that inventors are usually persons who are skilled in the field of the invention. The patent is addressed to and intended to be read by others skilled in the particular art. *Id.*

The primacy of claim terms notwithstanding, *Phillips* made clear that "the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification." *Id.* Although the claims themselves may provide guidance as to the meaning of particular terms,

those terms are part of "a fully integrated written instrument." *Id.* at 1315 (quoting *Markman*, 52 F.3d at 978). Thus, the *Phillips* court emphasized the specification as being the primary basis for construing the claims. *Id.* at 1314-17. As the Supreme Court stated long ago, "in case of doubt or ambiguity it is proper in all cases to refer back to the descriptive portions of the specification to aid in solving the doubt or in ascertaining the true intent and meaning of the language employed in the claims." *Bates v. Coe*, 98 U.S. 31, 38 (1878). In addressing the role of the specification, the *Phillips* court quoted with approval its earlier observations from *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998):

Ultimately, the interpretation to be given a term can only be determined and confirmed with a full understanding of what the inventors actually invented and intended to envelop with the claim. The construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction.

Consequently, *Phillips* emphasized the important role the specification plays in the claim construction process.

The prosecution history also continues to play an important role in claim interpretation. The prosecution history helps to demonstrate how the inventor and the PTO understood the patent. *Phillips*, 415 F.3d at 1317. Because the file history, however, "represents an ongoing negotiation between the PTO and the applicant," it may lack the clarity of the specification and thus be less useful in claim construction proceedings. *Id.* Nevertheless, the prosecution history is intrinsic evidence. That evidence is relevant to the determination of how the inventor understood the invention and whether the inventor limited the invention during prosecution by narrowing the scope of the claims.

Phillips rejected any claim construction approach that sacrificed the intrinsic record in favor

of extrinsic evidence, such as dictionary definitions or expert testimony. The *en banc* court condemned the suggestion made by *Tex. Digital Sys., Inc. v. Telegenix, Inc.*, 308 F.3d 1193 (Fed. Cir. 2002), that a court should discern the ordinary meaning of the claim terms (through dictionaries or otherwise) before resorting to the specification for certain limited purposes. *Id.* at 1319-24. The approach suggested by *Tex. Digital*—the assignment of a limited role to the specification—was rejected as inconsistent with decisions holding the specification to be the best guide to the meaning of a disputed term. *Id.* at 1320-21. According to *Phillips*, reliance on dictionary definitions at the expense of the specification had the effect of "focus[ing] the inquiry on the abstract meaning of words rather than on the meaning of the claim terms within the context of the patent." *Id.* at 1321. *Phillips* emphasized that the patent system is based on the proposition that the claims cover only the invented subject matter. *Id.* What is described in the claims flows from the statutory requirement imposed on the patentee to describe and particularly claim what he or she has invented. *Id.* The definitions found in dictionaries, however, often flow from the editors' objective of assembling all of the possible definitions for a word. *Id.* at 1321-22.

Phillips does not preclude all uses of dictionaries in claim construction proceedings. Instead, the court assigned dictionaries a role subordinate to the intrinsic record. In doing so, the court emphasized that claim construction issues are not resolved by any magic formula. The court did not impose any particular sequence of steps for a court to follow when it considers disputed claim language. *Id.* at 1323-25. Rather, *Phillips* held that a court must attach the appropriate weight to the intrinsic sources offered in support of a proposed claim construction, bearing in mind the general rule that the claims measure the scope of the patent grant.

4. Discussion

The parties present certain preliminary disputes, the resolution of which will guide the court's construction of the various claim terms. Primarily, the defendants contend that the patentees limited all of the system and methods claims presented in the '067 and the '823 patent by describing certain features of their system as constituting their "invention." The defendants rely heavily on *Microsoft Corp. v. Multi-Tech Sys., Inc.*, 357 F.3d 1340 (Fed. Cir. 2004). In *Microsoft*, the Federal Circuit concluded that a patentee's statements describing certain features of a system as the "invention" compelled the conclusion that the claims were limited to systems and methods that operated over a telephone line, even if certain claims did not explicitly recite that limitation. *Id.* at 1347-48. In that case, the court was persuaded that the statements in the summary of the invention section of the patents as well as the prosecution history characterized the invention as a whole, as opposed to a specific embodiment shown in the written description.

The present case is distinguishable from *Microsoft*. The court begins with the premise that the claims of the patent ultimately define the scope of the patent grant. In this case, although the applicants referred to certain aspects of their "invention" in the specification and the prosecution history, those references, read in context, do not invoke the rule announced in *Microsoft*. For starters, in many instances the actual claim language is bereft of the limitations sought to be imposed. For that reason, the defendants rely heavily on the description of Figure 1 in the patent. They seize on the plaintiff's own misleading reference to Figure 1 in the briefing to urge that Figure 1 shows the invention and depicts a direct connection between the cellular switch and the pre-paid service provider's host computer. The defendants add to the description of Figure 1 certain statements made in prosecution to advance their *Microsoft* argument.

Putting aside the plaintiff's characterization of Figure 1, the actual description of Figure 1 falls short of imposing the defendants' direct connection limitation.

In describing Figure 1, the specification states:

In accordance with the present invention, a cellular service provider 14 is linked to the cellular telecommunications switched network 2 cellular switch 8 via T1 land line 15.

'823 Patent, 5:23-25 (emphasis added). This passage of the specification does not state that the invention "requires a direct connection" or that the invention "is a direct connection" between the cellular switch and the prepaid service provider. In addition, although the specification states that "[w]ith particular reference to FIG. 1, the pre-paid cellular system 10 of the present invention is illustrated," '823 Patent, 5:9-11, this "illustration" is made in the context of the description of the preferred embodiment.¹

Beyond the specification, the defendants rely on certain passages from the prosecution history of the '067 patent. In particular, the defendants point to statements made in response to office action rejections directed to the pending system claim which appears to correspond to issued claim 2. During prosecution, the applicants argued that the Castro prior art reference did not invalidate certain claims because the subscriber calls did not go to the central station "i.e. the calls are 'unswitched' and sent directly to service provider 10 over line 15." Although the pending claim required the cellular switch to be coupled to the pre-paid carrier's host computer via an unswitched line, it does not appear to have required the calls to travel unswitched to the service provider 10. After making these arguments, the applicants submitted an additional amendment to pending claim 29, which

The defendants cite to other passages in the specification. *See* Defendants' Claim Construction Brief, at 10-11. The court has reviewed each of these references in reaching its decision on this issue.

added the requirement that the cellular switch forward calls from prepaid subscribers to the service provider "via said unswitched lines."

It is true that the applicants argued against the Castro reference by submitting a sketch which illustrates "applicants' invention in the context of the system disclosed in Castro" and that the sketch indicated that the calls were sent directly (unswitched) from the MTSO to the service provider. (emphasis added). Once again, the prosecution history statement does not equate the invention with a direct connection. Instead, the statement shows the invention "in the context of" the Castro system. Moreover, these statements must be read in the context of the pending claims to which the arguments were directed. In accordance with the statements made to the examiner, the language of issued claim 2 of the '067 patent specifically requires the calls to be forwarded from pre-paid subscribers to the pre-paid service provider over unswitched lines. Other claims in the patents-in-suit are directed toward other inventive features, and the defendants have not shown that the applicants clearly and unmistakably disclaimed all systems that are not directly connected to the cellular switch. Ventana Medical Systems, Inc. v. Biogenex Laboratories, Inc., 473 F.3d 1173 (Fed. Cir. 2006)(rejecting attempt to incorporate "direct dispensing" into construction of "dispensing" and observing that each claim does not necessarily cover every feature disclosed in the specification). Read in context, the passages from the specification and the prosecution history characterize an embodiment of the system that is actually claimed in claim 2 of the '067 patent. This case thus falls within the usual rule that the court should not limit the claims to the preferred embodiment. Phillips, 415 F.3d at $1314.^{2}$

The court likewise rejects the limitation proposed by Alltel and U.S. Cellular that a direct connection to the LEC is required.

In addition to the "direct connection" limitation, the defendants argue that the claims are limited to a system constructed to receive and forward "only" prepaid calls. Again, nothing in the asserted claims requires this limitation, but the defendants point to the prosecution history. In particular, the defendants argue that a portion of the prosecution history states that "[b]y adding the invention, only those calls having a unique ANI (defined as a pre-paid subscriber) are re-routed for purposes of validation and decrementation; no other calls are affected by the present invention." This passage, however, does not amount to a clear and unmistakable disclaimer of all systems that receive and forward both pre-paid calls and other calls. It suggests that only calls from pre-paid subscribers are routed to a pre-paid service provider for pre-paid purposes (i.e. validation and decrementation). Therefore, the court rejects the defendants' arguments that the prosecution history imposes this limitation across all of the claims of the '067 and the '823 patents.

The court now turns to a discussion of the various disputed terms. Where feasible, the court has ordered its discussion in the same sequence as that presented by the plaintiff in its opening claim construction brief. In light of the court's rejection of the defendants' primary arguments, the court has concluded that many of the claim terms require no further construction. As such, the court has provided constructions where necessary to resolve disputes over claim scope that go beyond those disputes raised by the defendants' primary argument.

1. Call

Many of the asserted claims require a "call." For example, claim 1 of the '823 patent requires "receiving the subscriber's wireless telephone number at a wireless switch, the telephone number corresponding to a wireless communications event initiated by a party calling the subscriber's wireless telephone number," and, if "the validating step is successful, completing a call." The parties

dispute the meaning of the term "call."

The plaintiff contends that a "call" consists of "the transmission of data from a cellular phone or other device, including data identifying the calling and called parties." The plaintiff's current construction of "call" appears to be that a call includes the communication of control data and, upon completion to the destination, voice data. Tr. of Markman Hearing, July 2, 2008, at 29. The defendants contend that the "call" must include at least voice communications.

In a prior case filed in Massachusetts, the plaintiff sponsored a different construction of the term "call." The plaintiff did so during claim construction briefing, expert reports, and trial. The relevant term appears in claim 15 of the '067 patent. The claim language provides "if the ANI is found in the stored reserved pre-paid cellular telephone numbers, *then forwarding the call* directly to a pre-paid service provider." '067 Patent, claim 15 (emphasis added). Specifically, in its claim construction briefing, the plaintiff told Judge Harrington that the proper construction of "call," if the term was construed at all, meant a "telephone communication or connection." *Freedom Wireless, Inc. v. Boston Communications Group, Inc., et al.*, 00-CV-12234 (D. Mass.)(Freedom Wireless' Memorandum of Law in Support of Claim Construction of U.S. Patent Nos. 5,722,067, and 6,157,823, at 14). In the same brief, the plaintiff elaborated:

Certain phrases require 'the call,' rather than only some specified identifier or identifiers, to be sent to the pre-paid switching system or the pre-paid service provider. Because the term 'the call' means a wireless (cellular) telephone call, these phrases require that the entire call—that is, the voice data and signaling information (identifiers) pertaining to that call—is forwarded. Accordingly, the above two phrases can be understood to mean that both the voice data and signaling information are received by the switch and are sent by the switch to the pre-paid switching system and/or pre-paid service provider.

Id. at 51 (emphasis added). From the materials submitted to this court, it appears that Judge

Harrington did not separately construe the term "call." Rather, he construed the entire claim limitation to mean: "if the ANI is found in the stored reserved pre-paid cellular telephone numbers, then forwarding the call directly to a pre-paid service provider comprising a host computer and a remote computer database server." *See* Rule 26(a)(2)(B) Expert Report of Dr. David B. Newman, Jr., Esq., p. 14, submitted in *Freedom Wireless, Inc. v. Boston Communications Group, Inc., et al.*, 00-CV-12234)(D. Mass)(reciting court's construction of claim 15).

After Judge Harrington issued his claim construction order, the plaintiff continued to assert its position that the term "call" required both voice and signaling data. In particular, the plaintiff served an expert report in which the expert opined that the prior art failed to invalidate claim 15 because the reference did not show the call being forwarded anywhere. According to the expert, the reference "just shows the signaling information being sent, and there is no mention of voice data." Rule 26(a)(2)(B) Expert Report of Dr. David B. Newman, Jr., Esq., p. 14, submitted in *Freedom Wireless, Inc. v. Boston Communications Group, Inc., et al.*, 00-CV-12234 (D. Mass). Likewise, it appears that the plaintiff's infringement expert testified at trial that "the call" meant the voice data and the signaling data. After a jury trial, the plaintiff secured favorable verdicts on infringement and invalidity. Eventually, the case was settled on appeal.

In the present case, the plaintiff argues that this court must construe limitations different from those addressed by Judge Harrington. In certain contexts, the court would agree with the plaintiff that a call could include simply signaling data, and not voice data. Nevertheless, in the context of these patents, the court is persuaded by the plaintiff's arguments to Judge Harrington that the call included both voice and signaling data because of the way that the patentees drafted the various claims. Even assuming that the plaintiff is not estopped from asserting a different construction in

this case, the claim language suggests that a call includes more than signaling data. For instance, claim 2 of the '067 patent requires a "means in said host computer for receiving a signal indicative of a pending call" and also requires that "said cellular switch forwards calls from the pre-paid subscribers to said pre-paid service provider via said unswitched lines." Similarly, claim 1 of the '823 patent requires "receiving the subscriber's wireless telephone number at a wireless switch" and, if a validation step succeeds, "completing a call." In light of the language of the claims, a "call" means "a telephone call, which includes voice data."

2. Wireless Switch/Cellular Switch

Claim 1 of the '823 patent requires "receiving the subscriber's wireless telephone number at a wireless switch" the "wireless switch recognizing the subscriber's wireless telephone number as being associated with the subscriber." The plaintiff argues that a wireless switch/cellular switch means "the MTSO (Mobile Telephone Switching Office) or MSC (mobile service switching center) including mobile switching equipment and databases, such as HLR (home location register) and VLR (visitor location register) databases, which are necessary for the completion of calls." The defendants argue that the wireless switch is "a component that switches calls." After reviewing the intrinsic record, and in particular the portion of the prosecution history that uses the term MTSO synonymously with cellular switch, the court defines the term to mean "the MTSO (mobile telephone switching office) or MSC (mobile telephone switching center)." *See* Plaintiff's Opening Brief, at 9, citing FREEDOM 0049143.

3. Recognizing

Claim 1 of the '823 patent requires the "wireless switch recognizing the subscriber's wireless telephone number as being associated with the subscriber." The plaintiff argues that "recognizing"

means "recognizing that a call requires processing by the pre-paid switching system based on identifying information." The defendants do not answer this construction in their brief, and the court adopts the plaintiff's proposal.

4. Identifier

The plaintiff argues that "identifier" or "identifying information" means "identifying information provided with a call that can be used, directly or indirectly, to establish the identity of a subscriber." The defendants argue that "identifier" is limited to "a number that has been dedicated for assignment to a pre-paid subscriber." The court is not persuaded that the invention is limited as the defendants contend. As such, the court adopts the plaintiff's proposal.

5. Communicating

Certain claims require communication between the wireless switch and the pre-paid service provider. For example, claim 27 of the '823 patent requires "communicating between the wireless switch and a pre-paid wireless service provider" The parties dispute whether the communication must occur over a direct line between the pre-paid service provider and the switch. For essentially the reasons assigned above, the court rejects the defendants' argument. No further construction is necessary.

6. Forwarding the identifier

Some of the asserted claims require that the wireless switch forward the identifier to a prepaid wireless service provider. '823 patent, claim 9. The plaintiff argues that this term means "passing the identifier, directly or indirectly, to a pre-paid service provider." The principal dispute is whether the forwarding must occur over a direct line. For the reasons previously stated, the court rejects this limitation. The term needs no additional construction.

7. Prepaid wireless service provider/prepaid switching system

The primary disputes concerning these terms is whether the prepaid wireless service provider or switching system must be connected over a direct line, or through a direct connection, to the wireless switch and the local exchange carrier. The court has rejected these limitations. Likewise, the court has rejected the defendants' proposed limitation, derived from the prosecution history, that the prepaid service provider be constructed to receive and forward only pre-paid calls. With these holdings, the court declines to adopt additional definitions for these terms. The terms are readily understandable, and the claims in which they appear provide additional limitations which must be satisfied for infringement to occur.

8. A computer with access to the database

Claims 1, 11, 34, 55, 56, and 59 of the '823 patent require "a computer with access to the database" or "a computer with access to a database." The parties' dispute is whether the computer must be connected directly to a cellular switch and/or receive or forward only prepaid calls. As indicated above, the defendants' "direct connection" and "receive and forward only pre-paid calls" arguments have been rejected, and the term needs no additional construction.

9. Validating

Claim 1 of the '823 patent requires "validating existence of a pre-determined subscriber account balance in the database." The court construes the term "validating" as proposed by the plaintiff to mean "confirming the existence of."

10. Account Balance

The plaintiff contends that this term means "the amount of available funds, time, or other accounting units. The 'account balance' may be a total of multiple balances." The defendants

contend that "account balance" is explicitly defined in the patents. They say that the account balance "is a value to be decremented for a call" and that the account balance must "be decremented before the prepaid system connects a call." The defendants point to various passages in the specification to support their construction. *See* '823 patent, 4:20-26 ("During the call progress, the account balance information at the computer database server is decremented based upon elapse of predetermined time periods at the predetermined time value for cellular telecommunications."). In addition, the defendants point to the prosecution history, which states: "[i]n applicants' invention, billing of selected customers occurs before the call reaches the central switching station. For customers with zero balance, the call never reaches the central switching station." Defendants' Brief, at 29, citing Exh. 4. at 5.

With respect to the defendants' first proposed limitation, the passage from the specification discusses what happens to an account balance in circumstances where the system is monitoring a call in real time. It does not, however, explicitly define account balance, and to the extent that the claim language does not require decrementing a balance, it is improper to import such a limitation into the claim. As to the defendants' second proposed limitation, the arguments are divorced from the claims that were actually being addressed during prosecution of the '067 patent. In particular, the relevant language of claim 2 of the '067 patent requires "means in said host computer for receiving a signal indicative of a pending call from said cellular switch and for forwarding the call to the local exchange carrier *after confirming that the balance in the account corresponding to the ANI is greater than a predetermined minimum.*" '067 patent, claim 2 (emphasis added). The relevant excerpts from the prosecution history sought to distinguish the Castro system from the applicants' system, and the then-pending claim language reflected this. The defendants have not shown that the

statement in the prosecution history amounts to a clear disavowal of claim scope relating to the term "account balance." The court defines "account balance" as "the amount of available funds, time, or other accounting units."

11. Passes the Identifier to the Wireless Switch and Causes the Call to be Completed

Claim 9 of the '823 patent states "if the validation is successful, passes the identifier to a wireless switch and causes the call to be completed." The primary dispute between the parties is whether the identifier must be passed to the wireless switch via a direct line. There is no support in the claim language for this limitation, and the court has rejected the defendants' arguments based on the *Microsoft* decision. No additional construction is required.

12. Periodically Validating

Some of the asserted claims include the term "periodically validating." For instance, claim 2 of the '823 patent describes "periodically validating a call based on the balance associated with the account during the telecommunications event until the call is terminated." The plaintiff urges that the term means "checking from time to time during a call that the balance is sufficient for at least a portion of the call." The defendants contend that the "periodic" validating must occur at regular intervals, as described in the specification. '823 Patent, 4:23-25. Despite this exemplary passage in the specification, the claim language is broad enough to include validation at irregular intervals. In light of *Phillips*' directive that limitations from the embodiments should not be read into the claims, the court concludes that the plaintiff's proposed construction is closer to correct. The court constructs periodically to mean "from time to time." The balance of the claim language needs no construction.

13. Termination

Several of the asserted claims require the call to be "terminated" if the prepaid subscriber's account balance has insufficient funds for the call to continue. The plaintiff argues that the term means "to bring an end to the call." The defendants appear to suggest that the call being terminated must be passing through the computer with access to the database to the destination. The basis for the limitation appears to be a passage in the prosecution history that the prior art Freese apparatus never "possesses" the call. Read in context, however, the applicants were stating that the Freese apparatus was not designed so it could terminate a call. The passage from the prosecution history does not require that the call being terminated be "passing through" the computer. The plaintiff's construction is correct, and the court adopts it.

14. Reserved Pre-Paid Subscriber Cellular Telephone Number Identifying a Prepaid Subscriber

Claim 15 of the '067 patent requires "at the cellular switch checking the ANI against each stored reserved pre-paid cellular telephone number identifying a pre-paid subscriber." The plaintiff seeks to construe this term to mean "a cellular telephone number associated with a prepaid subscriber." The defendants ask the court to construe the "reserved pre-paid cellular telephone number" as "a telephone number that has been dedicated for assignment to a pre-paid subscriber to identify the subscriber as being a pre-paid subscriber." The plaintiff's proposed construction reads out the word "reserved" in the claim language. The term "reserved pre-paid cellular telephone number" is defined as a telephone number "dedicated for assignment to a pre-paid subscriber" as proposed by the defendants.

15. Routing

Several of the claims include a "routing" limitation. Relying primarily on one of the

plaintiff's extrinsic sources, the defendants contend that "routing" requires the "selection of a communications path *before sending*." (emphasis added). The extrinsic source actually defines "routing" as "the selection of a communications path." Defendants' Claim Construction Brief, Exh.

21. The intrinsic record does not require the selection to occur "before sending." The court therefore defines "routing" as "selecting a communications path."

16. Each

Claim 15 of the '067 patent requires "checking the ANI against each stored reserved pre-paid cellular telephone number." The dispute is whether "each" means "every" such that the method requires checking of every individual telephone number in the database, even after the relevant number has been located. Despite the plaintiff's arguments to the contrary, the court concludes that the defendants' construction is correct. The court construes "each" to mean "every one of two or more considered individually or one by one." *Microstrategy, Inc. v. Business Objects, S.A.*, 331 F. Supp.2d 432 (E.D. Va. 2004), *aff'd* 429 F.3d 1344, 1351, 52 (Fed. Cir. 2005); *Medtronic, Inc. v. Guidant Corp.*, 2004 WL 1179338, at *42 (D. Minn. 2004). The patentees could have easily drafted this limitation in a manner that did not require the system to check every number in the database. They did not, however, and this court is not at liberty to re-draft their claims.

17. Vended medium

Relying on the sole embodiment argument, the defendants seek to limit the term "vended medium" to a prepaid calling card. This construction is rejected. Likewise, the cited passage from the prosecution history distinguished the Rodriguez system because the codes of the Rodriguez system were identified with a particular phone. This format prohibited the codes from being preprinted on a type of vended medium and supplied at a retail outlet, as the codes would change

whenever a block of time was added to a phone. The court concludes that by making this argument, the applicants were not conceding that preprinting on a physical medium is required in all cases. That several claims specifically require a card supports the court's conclusion that the term "vended medium" is broader than a calling card. The term is construed to mean "a purchased item, physical or electronic, capable of bearing information."

18. Alphanumeric Sequence

The court construes the term "alphanumeric" to mean "consisting of both letters and digits." For those claims which include an "alpha/numeric" limitation, the court construes this term to mean "consisting entirely of letters, entirely of digits, or both." *See* Defendant's Claim Construction Brief, at Exh. 19 (excerpt from prosecution history stating that "[t]he term 'alphanumeric' in claims 30-32, 38, and 47 and new claims 61-63 has been replaced by 'alpha/numeric' in order to emphasize that the sequence may be entirely alphabetic, entirely numeric, or both.").

19. Represents a Specific, Predetermined Level of Credit

Claim 1 of the '851 patent describes "user-input, obtained from a vended medium, that represents a specific, predetermined level of credit." The plaintiff argues that this term means that the user-input "can be used to determine a predetermined amount by which an account balance can be increased." The defendants argue that the user-input must "directly indicate a fixed denomination." The defendants point to the language of the claims, which requires the user-input to "represent a specific, predetermined level of credit." They also point to a passage in the prosecution history in which the applicants stated "[t]hus, 'user-input' does not simply mean any number that has some sort of indirect association with a variable level of credit, as would be the case with an ordinary credit card number, for which the available credit can vary from day to day." In

light of the claim language, read in light of the prosecution history, the defendants' argument is persuasive. The court construes this term to mean "directly indicates a fixed denomination."

20. Indefiniteness arguments

The defendants argue that claim 20 of the '823 patent is invalid for indefiniteness. They also contend that claim 54 of the '851 patent is invalid for indefiniteness. The undersigned treats these positions as motions for summary judgment of invalidity of these two claims. So treated, the court recommends that the motions be denied for the following reasons.

First, claim 20 of the '823 patent provides:

A system for managing pre-paid wireless communications, comprising:

a wireless switch at which a wireless call request is received; and

a pre-paid wireless service provider, in communication with the wireless switch, that selectively authorizes the wireless call request based on information in the wireless call request that identifies a pre-paid wireless subscriber to whom to [sic] call request is directed;

wherein the pre-paid wireless service provider selectively authorizes the wireless call request by validating in real time an account associated with the identified pre-paid wireless subscriber; and

wherein validation of an account by the pre-paid wireless service provider includes *causing a call is caused to be terminated* when a time limit based on a balance in the account is expired.

(emphasis added).

The defendants argue that the claim is indefinite because the typographical error in the last limitation creates a nonsensical method of operation. This argument is rejected. One of skill in the art reading this limitation would construe it to mean "wherein validation of an account by the prepaid wireless service provider includes causing a call to be terminated when a time limit based on a balance in the account is expired."

The defendants also contend that claim 54 of the '851 patent is invalid for indefiniteness because it attempts to claim both an apparatus and a method step that the apparatus cannot be configured to perform. *IPXL Holdings, L.L.C. v. Amazon.com, Inc.*, 430 F.3d 1377, 1384 (Fed. Cir. 2005).

Claim 54 of the '851 patent provides:

An article of manufacture for use in a preauthorized wireless telecommunications system comprising:

a card; and

at least one surface of the card on which is displayed an alpha/numeric value;

the alpha/numeric value representing a specific, predetermined level of credit to be applied to an account of a user of a wireless telecommunications device, wherein upon receipt of the alpha/numeric value and an identifier of the wireless telecommunications device by a wireless service provider, the level of credit in the account is increased by the predetermined level.

The undersigned construes this claim to be an apparatus claim that describes the apparatus by reference to its functional capabilities. The card has an alpha/numeric value that, upon its receipt by a wireless service provider, causes the level of credit in an account to be increased. As such, it does not run afoul of *IPXL Holdings* and is not indefinite. *See Yodlee, Inc. v. CashEdge, Inc.*, 2006 WL 3456610 (N.D. Cal. 2006).

5. Conclusion

The court adopts the above constructions. The parties are ordered that they may not refer, directly or indirectly, to each other's claim construction positions in the presence of the jury. Likewise, the parties are ordered to refrain from mentioning any portion of this opinion, other than the actual definitions adopted by the court, in the presence of the jury. Any reference to claim construction proceedings is limited to informing the jury of the constructions adopted by the court.

With respect to the undersigned's recommendation on the indefiniteness arguments, a party's failure to file written objections to the findings, conclusions and recommendations contained in this Report within ten days after being served with a copy shall bar that party from *de novo* review by the district judge of those findings, conclusions and recommendations and, except on grounds of plain error, from appellate review of unobjected-to factual findings and legal conclusions accepted and adopted by the district court. *Douglas v. United States Auto. Ass'n*, 79 F.3d 1415, 1430 (5th Cir. 1996) (en banc).

SIGNED this 17th day of October, 2008.

CHARLES EVERINGHAM

UNITED STATES MAGISTRATE JUDGE